

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of identifying a candidate retinoblastoma (RB) pathway modulating agent, said method comprising the steps of:
 - (a) providing ~~an~~ a first assay system comprising a Chaperonin containing T-complex 1 subunit 6A (CCT6) polypeptide or nucleic acid;
 - (b) contacting the first assay system with a test agent ~~under conditions whereby, but for the presence of the test agent, the system provides a reference activity; and~~
 - (c) determining the expression or activity of the CCT6 polypeptide or nucleic acid in the first assay system in the presence or absence of the test agent of step (b), wherein a change in the expression or activity of CCT6 polypeptide or nucleic acid in the presence of said test agent detecting a test agent biased activity of the assay system, wherein a difference between the test agent biased activity and the reference activity identifies the test agent as a candidate RB pathway modulating agent;
 - (d) confirming that the test agent of (b) is a candidate RB pathway modulating agent by providing a second assay system comprising a CCT6 polypeptide or nucleic acid, wherein the second assay system is able to measure the RB pathway;
 - (e) contacting the second assay system with the test agent of step (b); and
 - (f) measuring the RB pathway in the second assay system in the presence or absence of the test agent of step (b), wherein a change in the RB pathway in the presence of said test agent confirms the test agent as a candidate RB pathway modulating agent.
2. (Currently amended) The method of claim 1, wherein the assay system comprises cultured cells that express the CCT6 polypeptide.

3. (Currently amended) The method of claim 2, wherein the cultured cells additionally have defective RB function.
4. (Currently amended) The method of claim 1, wherein the assay system includes a screening assay comprising a CCT6 polypeptide, and the candidate test agent is a small molecule modulator.
5. (Currently amended) The method of claim 4, wherein the assay is a binding assay.
6. (Currently amended) The method of claim 1, wherein the assay system is selected from the group consisting of an apoptosis assay system, a cell proliferation assay system, an angiogenesis assay system, and a hypoxic induction assay system.
7. (Currently amended) The method of claim 1, wherein the assay system includes a binding assay comprising a CCT6 polypeptide and the candidate test agent is an antibody.
8. (Currently amended) The method of claim 1, wherein the assay system includes an expression assay comprising a CCT6 nucleic acid and the candidate test agent is a nucleic acid modulator.
9. (Currently amended) The method of claim 8, wherein the nucleic acid modulator is an antisense oligomer.
10. (Currently amended) The method of claim 8, wherein the nucleic acid modulator

is a phosphothioate morpholino oligomer (PMO).

11. (Currently amended) The method of claim 1 additionally comprising:
~~(d)~~ (g) administering the candidate RB pathway modulating agent identified in step (c) to a model system comprising cells defective in RB function and[[,]] detecting a phenotypic change in the model system that indicates that the RB function is restored.
12. (Currently amended) The method of claim 11, wherein the model system is a mouse model with defective RB function.
13. (Withdrawn) A method for modulating a RB pathway of a cell comprising contacting a cell defective in RB function with a candidate modulator that specifically binds to a CCT6 polypeptide, whereby RB function is restored.
14. (Withdrawn) The method of claim 13 wherein the candidate modulator is administered to a vertebrate animal predetermined to have a disease or disorder resulting from a defect in RB function.
15. (Withdrawn) The method of claim 13 wherein the candidate modulator is selected from the group consisting of an antibody and a small molecule.
16. (Canceled)
17. (Currently amended) The method of claim ~~16-1~~, wherein the secondary second assay system comprises cultured cells.
18. (Currently amended) The method of claim ~~16 1~~, wherein the secondary second assay

system comprises a non-human animal.

19. (Currently amended) The method of claim 18, wherein the non-human animal mis-expresses a RB pathway gene.

20. (Withdrawn) A method of modulating RB pathway in a mammalian cell comprising contacting the cell with an agent that specifically binds a CCT6 polypeptide or nucleic acid.

21. (Withdrawn) The method of claim 20 wherein the agent is administered to a mammalian animal predetermined to have a pathology associated with the RB pathway

22. (Withdrawn) The method of claim 20 wherein the agent is a small molecule modulator, a nucleic acid modulator, or an antibody.

23. (Withdrawn) A method for diagnosing a disease in a patient comprising:

- (a) obtaining a biological sample from the patient;
- (a) contacting the sample with a probe for CCT6 expression;
- (b) comparing results from step (b) with a control;
- (c) determining whether step (c) indicates a likelihood of disease.

24. (Withdrawn) The method of claim 23 wherein said disease is cancer.

25. (Withdrawn) The method according to claim 24, wherein said cancer is a cancer as shown in Table I as having >25% expression level.